

Abstract of the Invention

A bone cement mixing device has a canister which is modular in design and constructed from a transparent material. The mixing device further has a mixing head assembly having a crank which is operatively coupled to a mixing blade via a gear train. The gear train is configured to drive the mixing blade in a reciprocating manner including the varying of the angular velocity, direction of travel, and angular distance of travel of the blade while the crank is rotated at a constant velocity and direction. The mixing blade has a fluid passage defined therein which allows the liquid cement component to be delivered at various locations within the mixing chamber of the canister. A method of mixing bone cement is also disclosed.